5 Claims

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1. A contact plate for fuel cells with a coherent active area on at least one side of the contact plate, said side envisaged for contacting a diffusion layer, a fuel cell electrode or an electrolyte membrane, wherein the active area consists of a contact surface which over the whole surface comprises a coating of an electrically conductive, corrosion-resistant material, and of recesses, so that the recesses form a channel structure, characterised in that the coating (4) is omitted at least in bottom regions (5) of the recesses (3).

2. A contact plate according to claim 1, characterised in that it is manufactured on the basis of a plate body (1) of passivating, corrosion-resistant metal, preferably of stainless steel or titanium.

3. A contact plate according to one of the claims 1 or 2, characterised in that the coating (4) extends exclusively over the contact surface (2).

4. A contact plate according to one of the claims 1 to 3, characterised in that the coating (4) leaves free an edge region (12) of the mentioned side of the contact plate outside the active area (11).

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- 5. A contact plate according to one of the claims 1 to 4, characterised in that the coating (4) contains carbon, preferably in the form of graphite, niobium, a rare earth metal, a precious metal, preferably gold, silver, platinum, palladium and/or rhodium, and/or a metal boride, a metal nitride and/or a metal carbide, preferably titanium boride, titanium nitride, titanium carbide and/or chromium nitride, and/or silicon carbide, or consists of one or more previously mentioned materials or alloy of these materials and preferably of a thermoplastic or duroplastic binding agent for depositing in liquid form.
- 6. A contact plate according to one of the claims 1 to 5, characterised in that it has a material thickness between 0.05 mm and 0.5 mm, preferably between 0.07 and 0.2 mm.
- 7. A fuel cell or fuel cell stack containing at least one contact plate according to one of the claims 1 to 6 as a monopolar, bipolar and/or end plate.
- 8. A method for manufacturing a contact plate according to one of the claims 1 to 6, characterised in that the coating (4) is deposited by a screen printing, roller printing or stencil printing method or by way of a metering method.
- 9. A method for manufacturing a contact plate according to one of the claims 1 to 6, characterised in that the coating (4) is

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deposited by pad galvanisation (tampon plating).

10. A method according to one of the claims 8 or 9, characterised in that the recesses (3) remain free of the coating (4) without prior masking of the recess (3).

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